

## PATTERN CARD

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

The present invention relates to a pattern card, and more particularly a pattern card on which a pattern or picture with a three-dimensional effect can appear by easily removing printing ink on a base material.

#### 2. Description of Related Art

A pattern or picture will appear on a pattern when a user removes partial material on the pattern card according to a predetermined design.

With reference to Fig. 7, a first conventional pattern card is composed of an aluminum or copper plate (60), and dark paint (61) coated on the aluminum or copper plate (60). When a user removes the dark paint (61) by a drawknife according to the predetermined design, a pattern or picture appears.

However, because there is a high level of adhesion between the dark paint (61) and the aluminum or copper plate (60), and the dark paint (61) has a high level of cohesion in itself, it is very difficult for the user to remove the dark paint (61). Furthermore, the pattern or picture only appears with a color of silver or copper after the aluminum or copper is removed, so the pattern card's decorative effect is monotonous and uninteresting.

As illustrated in Fig. 8, a second conventional pattern card is composed of a paper sheet (70), an aluminum or copper film (71), and dark printing ink (72) coated on the aluminum or copper film (71). Because there is a high level of adhesion between the dark printing ink (72) and the aluminum or copper film (71), and the dark painting ink (72) has a high level of cohesion in itself, this

1 pattern card has the same problems as mentioned above.

2 With reference to Fig. 9, a third conventional pattern card is composed  
3 of a paper sheet (80), an aluminum or copper film (81), dark printing ink (82),  
4 and picture printing ink (83) applied on the dark printing ink (82). Because there  
5 are high levels of adhesion among the dark printing ink (82), the picture printing  
6 ink (83) and the aluminum or copper film (81), and the dark printing ink (82) and  
7 picture printing ink (83) have a high level of cohesion in themselves, this pattern  
8 card has the same problems as mentioned above.

9 Therefore, the invention provides an improved pattern card to mitigate  
10 or obviate the aforementioned problems.

#### 11 SUMMARY OF THE INVENTION

12 The main objective of the present invention is to provide a pattern card  
13 on which a pattern or picture with a three-dimensional effect can appear by easily  
14 removing printing ink on a base material.

15 Other objectives, advantages and novel features of the invention will  
16 become more apparent from the following detailed description when taken in  
17 conjunction with the accompanying drawings.

#### 18 BRIEF DESCRIPTION OF THE DRAWINGS

19 Fig. 1 is a top view of a pattern card in accordance with the present  
20 invention;

21 Fig. 2 is a cross sectional view of a first embodiment of the pattern card  
22 of the invention;

23 Fig. 3 is a cross sectional view of a second embodiment of a base  
24 material of the pattern card of the invention;

1           Fig. 4 is a cross sectional view of a third embodiment of a base material  
2 of the pattern card of the invention;

3           Fig. 5 is a cross sectional view of a fourth embodiment of a base material  
4 of the pattern card of the invention;

5           Fig. 6 is a cross sectional view of the fourth embodiment of the pattern  
6 card of the invention;

7           Fig. 7 is a cross sectional view of a first conventional pattern card;

8           Fig. 8 is a cross sectional view of a second conventional pattern card;  
9 and

10          Fig. 9 is a cross sectional view of a third conventional pattern card.

#### 11   DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

12          With reference to Figs. 1-2, a pattern card in accordance with the present  
13 invention has a paper sheet (10). A color texture layer (20) with regular or  
14 irregular patterns is printed on the paper sheet (10). The paper sheet (10) and the  
15 color texture layer (20) constitute a base material (not numbered). A wax layer  
16 (21) is formed on the color texture layer (20). A protection printing ink (22) is  
17 coated on the wax layer (21), and a picture printing ink (23) is partially coated on  
18 the protection printing ink (22) according to the designed picture's profile and  
19 contour. Alternatively, the picture printing ink (23) can be randomly coated on  
20 the protection printing ink (22) for a user to freely design the picture. Because  
21 the wax layer (21) is between the protection printing ink (22) and picture printing  
22 ink (23) to reduce the adhesion of the printing ink (22, 23), it is very easy for the  
23 user to remove the printing ink (22, 23).

24          The protection printing ink (22) and picture printing ink (23) can be

1 mixed with wax in the proportion of 10% for reducing the cohesion of the  
2 printing ink (22, 23), so the protection printing ink (22) and picture printing ink  
3 (23) can be removed more easily.

4 In use, the user removes the picture printing ink (23) by moving a  
5 drawknife along the picture's profile and contour, and removes the protection  
6 printing ink (22) as well, so the designed picture appears on the color texture  
7 layer (20) with a three-dimensional effect The picture can be drawn as an animal  
8 such as a hippo or dolphin etc., as shown in Fig. 1.

9 The base material in accordance with the present invention has various  
10 configurations. With reference to Fig. 3, the base material is composed of the  
11 paper sheet (10) and the color texture layer (20). In another embodiment, as  
12 shown in Fig. 4, the base material is composed of the paper sheet (10) and a  
13 metal film (24) such as aluminum or copper film. The wax layer (21), protection  
14 printing ink (22), and picture printing ink (23) can be in turn provided on the  
15 metal film (24). The protection printing ink (22) and picture printing ink (23)  
16 also can be mixed with wax in the proportion of 10%. When the protection  
17 printing ink (22) and picture printing ink (23) are removed, the picture with  
18 metallic luster appears on the metal film (24). Alternatively, the picture printing  
19 ink (23) can be eliminated, and the user can freely draw on the protection  
20 printing ink (22).

21 With reference to Figs. 5-6, in a further embodiment, the base material is  
22 composed of the paper sheet (10), a vacuum plating layer (30), and a plastic film  
23 (40). The wax layer (21), protection printing ink (22), and picture printing ink  
24 (23) are in turn provided on the plastic film (40). The protection printing ink (22)

1 and picture printing ink (23) also can be mixed with wax in the proportion of  
2 10%. When the protection printing ink (22) and picture printing ink (23) are  
3 removed, the picture appears on the plastic film (24). Alternatively, the picture  
4 printing ink (23) can be eliminated, and the user can freely draw on the  
5 protection printing ink (22).

6 The plastic film (40) can be a silver, gold, colorized or laser film formed  
7 on the vacuum plating layer (30).

8 It is to be understood, however, that even though numerous  
9 characteristics and advantages of the present invention have been set forth in the  
10 foregoing description, together with details of the structure and function of the  
11 invention, the disclosure is illustrative only, and changes may be made in detail,  
12 especially in matters of shape, size, and arrangement of parts within the  
13 principles of the invention to the full extent indicated by the broad general  
14 meaning of the terms in which the appended claims are expressed.